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09/883,131	06/15/2001	John Russell Watts	50021-00001	8204

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EXAMINER

LUGO, CARLOS

ART UNIT PAPER NUMBER

3677

DATE MAILED: 02/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/883,131

Applicant(s)

WATTS, JOHN RUSSELL

Examiner

Carlos Lugo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-40 and 42-58 is/are pending in the application.
- 4a) Of the above claim(s) 1-36 and 41 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 39 is/are allowed.
- 6) ☒ Claim(s) 37,38,40 and 42-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 04 December 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to applicant's amendment filed on December 4, 2002, wherein claims 1-36 and 41 were cancel.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
3. **Claims 37-40,42-58 are rejected** under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 37,38 and 44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 37,38 and 44 are depended from claim 42. The subject matter claimed in the preamble of each claim (Claim 37 Lines 1-15, Claim 38 Lines 1-16 and Claim 44 Lines 1-7) was already claimed in claim 42.

Claim 39 recites the limitation "the axis of revolution" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 39 recites the limitation "the body of the leg" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 39 recites the limitation "the surface of the recess" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 39 recites the limitation "the body" in lines 23 and 26. There is insufficient antecedent basis for this limitation in the claim.

Claim 39 recites the limitation "the disc-like member" in line 41. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the axis of revolution" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the body of the leg" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the surface of the recess" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the angular disposition of the cam" in line 22. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the locking and unlocking configurations" in line 22. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the cam axis of rotation" in line 44. There is insufficient antecedent basis for this limitation in the claim.

Claim 40 recites the limitation "the longitudinal axii of the short and longer recess" in line 45. There is insufficient antecedent basis for this limitation in the claim.

Claim 42 recites the limitation "the barrel drive recess" in line 20. There is insufficient antecedent basis for this limitation in the claim.

Claim 43 recites the limitation "the first cam portion" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 43 recites the limitation "the cam axis of rotation" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 43 recites the limitation "the longitudinal axii of the short and longer recess" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 44 recites the limitation "the first cam portion" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 45 recites the limitation "the barrel axis of rotation" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 45 recites the limitation "the drive pin" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 46 recites the limitation "the barrel axis of rotation" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim 48 recites the limitation "the first cam portion" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 49 recites the limitation "the bridge" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 51 recites the limitation "the removal configuration" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claims 54 and 55 are indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is the invention claimed.

Claim 55 recites the limitation "two such portions" in line 2. it is unclear to which portions the applicant is referring.

Claim 58 recites the limitation "the channel cross section" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim 58 recites the limitation "the radii of the balls" in line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 42-46,37,38,49-51,54,55 and 57 are rejected** under 35 U.S.C. 102(b) as being anticipated by US Pat No 4,998,422 to Borgmann et al (Borgmann).

Regarding claims 42,38,44,54 and 55, Borgmann discloses a padlock (10) including a shackle (14) having a short leg (26) comprising a first locking recess (32) and a longer leg (30) comprising an opposed second locking recess (32). The longer leg is connected by a longitudinally elongated recess or flat to a peripheral recess (34) disposed towards the end of the longer end.

A casing (12) has a short and a longer recess (36 and 38) extending into the casing from a first end surface to accept the short and longer shackle leg respectively. A central recess (142) extends into the casing from an opposed second end surface. An offset recess (141) extends into the casing from the opposed second

end surface and intersects the central recess. The intersection defines a first and second longitudinally elongated cusp portions. A transverse recess (42) extends into the casing from a first side of the casing.

A cylinder (16) has a key operable barrel characterized by an undisplaced position enabling key removal.

The transverse recess supports two opposed balls (20). A first ball is able to protrude into the short recess and first locking recess and a second ball to protrude into the longer recess and second locking recess.

A cam (64) includes a first cam position (70) to control the balls and a cam drive portion that includes at least one drive recess (82) defined between a spaced drive shoulder (66) and at least one additional drive recess (84).

The cam is operable by the barrel through an interspaced couplar (24) that projects into the additional recess (84) of the cam while being supported in the barrel drive recess to provide a Type 2 padlock.

The cam is operable by the barrel through an interspaced couplar (24) that projects into the drive recess (82) of the cam while being supported in the barrel drive recess to provide a Type 1 padlock.

The Type 1 padlock is characterized by an open configuration where the short leg is free of the casing, the longer leg is supported in the casing and the key is removable, and the Type 2 padlock is characterized by an open configuration where the short leg is free of the casing, the longer leg is supported in the casing and the

key and the barrel cannot be rotated to the undisplaced position to enable key removal.

As to claim 37, Borgmann discloses the padlock further includes a coupler (24) to facilitate operable coupling between the cam and the cylinder.

As to claim 43, Borgmann discloses that the cam includes first and second unlocking recesses (70).

As to claims 45 and 46, Borgmann discloses that in the Type 1 padlock, the coupler moves the cam to the unlocking configuration and the barrel and the key is removable and in a Type 2 padlock, wherein the coupler moves the cam to the unlocking configuration and the barrel and the key is restrained.

As to claim 49, Borgmann discloses that the padlock includes a torsion spring (60) to moves the cam towards the locking configuration.

As to claim 50, Borgmann discloses that the padlock includes a compression spring within the longer recess (Figure 1).

As to claim 51, Borgmann discloses that the cylinder (16) is removable (Col. 4 Lines 27 and 28).

As to claim 57, Borgmann discloses that the peripheral recess comprises a peripheral channel (34) around the periphery of the shackle body.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 40,48,52,56 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 4,998,422 to Borgmann et al (Borgmann) in view of US Pat No 5,377,511 to Meckbach.

Regarding claims 40 and 48, Borgmann discloses a padlock (10) including a shackle (14) having a short leg (26) comprising a first locking recess (32) and a longer leg (30) comprising an opposed second locking recess (32). The longer leg is connected by a longitudinally elongated recess or flat to a peripheral recess (34) disposed towards the end of the longer end.

A casing (12) has a short and a longer recess (36 and 38) extending into the casing from a first end surface to accept the short and longer shackle leg respectively. A central recess (142) extends into the casing from an opposed second end surface. An offset recess (141) extends into the casing from the opposed second end surface and intersects the central recess. The intersection defines a first and second longitudinally elongated cusp portions. A transverse recess (42) extends into the casing from a first side of the casing.

A cylinder (16) has a key operable barrel characterized by an undisplaced position enabling key removal.

The transverse recess supports two opposed balls (20). A first ball is able to protrude into the short recess and first locking recess and a second ball to protrude into the longer recess and second locking recess.

A cam (58) controls the balls. The cam has an angular disposition in the locking and unlocking configurations being determined by a stop (62) comprising a disc-like member (136) having a stop shoulder (88).

The padlock is characterized in that in an open configuration where the short leg is free of the casing, and in a closed configuration wherein the short leg is free of the casing and the longer leg is supported in the casing.

The cam further includes a first cam position (72) to control the balls and a cam drive portion that includes at least one drive recess (82) defined between a spaced drive shoulder (66) and at least one additional drive recess (84).

However, Borgmann fails to disclose that the cam includes first, second and third unlocking recesses. Borgmann discloses that the cam only includes first and second unlocking recesses.

Meckbach teaches a padlock having a cam member (25) that includes first, second and third unlocking recesses (26 and 33).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cam with first, second and third unlocking recesses, as taught by Meckbach, into a padlock as described by Borgmann, in order to take out the shackle from the casing.

As to claim 52, Borgmann fails to disclose that the cylinder is retained in the casing by a threaded fastener.

Meckbach teaches the use of a threaded fastener (23) to retain a cylinder (3) in a casing.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a threaded fastener, as taught by Meckbach, into a padlock device as described by Borgmann, in order to retain the cylinder in the casing.

As to claims 56 and 58, Borgmann fails to disclose that the longitudinally elongated recess comprises a longitudinal channel.

Meckbach discloses the use of a longitudinal channel (14) in the longer leg of the shackle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an elongated channel in the elongated recess, as taught by Meckbach, into a padlock device as described by Borgmann, in order to facilitate the withdraw of the shackle from the padlock.

Allowable Subject Matter

8. **Claim 39 is allowed.**
9. **Claim 47 would be allowable** if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Reasons For Allowance

10. The following is an examiner's statement of reasons for allowance:

Claims 39 and 47 are allowable over the prior art of record because the teachings of the references taken as a whole do not teach or render obvious the combination set forth, including that a disc-like member includes inwardly protruding

fingers that are engageable with the first drive shoulder when the cam is in the unlocked or locked configuration.

Borgmann (US 4,998,422) discloses a padlock (10) including a shackle (14) having a short leg (26) comprising a first locking recess (32) and a longer leg (30) comprising an opposed second locking recess (32). The longer leg is connected by a longitudinally elongated recess or flat to a peripheral recess (34) disposed towards the end of the longer end.

A casing (12) has a short and a longer recess (36 and 38) extending into the casing from a first end surface to accept the short and longer shackle leg respectively. A central recess (142) extends into the casing from an opposed second end surface. An offset recess (141) extends into the casing from the opposed second end surface and intersects the central recess. The intersection defines a first and second longitudinally elongated cusp portions. A transverse recess (42) extends into the casing from a first side of the casing.

A cylinder (16) has a key operable barrel characterized by an undisplaced position enabling key removal.

The transverse recess supports two opposed balls (20). A first ball is able to protrude into the short recess and first locking recess and a second ball to protrude into the longer recess and second locking recess.

A cam (64) includes a first cam position (70) to control the balls and a cam drive portion that includes at least one drive recess (82) defined between a spaced drive shoulder (66) and at least one additional drive recess (84).

However, Borgmann fails to disclose that a disc-like member includes inwardly protruding fingers that are engageable with the first drive shoulder when the cam is in the unlocked or locked configuration. Borgmann disclose a disc-like member (148) having inwardly protruding fingers (150), but the fingers never engage the drive shoulder.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion


11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lugo. The examiner phone number is (703)-

305-9747. The fax number for correspondence before a final action is (703)-872-9326 and the fax number for correspondence after final action is (703)-872-9327. The email direction of the examiner is carlos.lugo@uspto.gov. The examiner can normally be reached on Monday to Friday from 9:30am to 6:30pm (EST). If the examiner is not available, please leave a message, including the application number and the examiner will answer the message as soon as possible.

February 12, 2003


ROBERT J. SANDY
PRIMARY EXAMINER